

System Quality Consultants, Inc. N00014-94-C-2063

TECHNICAL STATUS REPORT

FOR THE PERIOD ENDING 30 JUNE 96

Executive Summary

During this month's reporting period, SQC continued to provide project management support to the Backgrounds Data Center (BDC). In addition to the Product Assurance Manager, SQC provided management of the Quality Assurance, Configuration Management, and Specification and Test efforts. The most significant event that occurred is the processing of MSX Early OPS data.

Task 1--Project Management Support

Abstract

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This task requires SQC to provide risk management analysis, software cost estimates, procurement strategies, program office organization and staff planning, schedule and resource allocation planning, program planning and documentation, project control system accounting, and training.

Work Performed During JUN 96

Provided Specification & Test (S&T), Quality Assurance (QA), and Configuration Management (CM) input to MSX project scheduling and resource allocation planning.

Provided PM, S&T, QA, and CM input to the monthly MSX and Core status reports. Edited these status reports for the BDC.

Continued to revise data bases to streamline Problem Report/Change Requests (PR/CR) processing, OCM Library reporting activities, and Operations activity reports.

DISTRIBUTION STATEMENT A	
Approved for public release;	
Distribution Unclassified	

DTIC QUALITY INSPECTED 3

Continued modification of Operations databases to improve metric reporting.

Performed additional work on BDC daily receipt and distribution report. Modified BDC Rcpt/Dist dB to filter out additional internal BDC distribution of data products

Represented the BDC in a meeting with a representative from BMDO/TRN and briefed BDC capabilities and VDC plans.

Represented BDC at joint NRL/Hughes STX Data Center Conference.

Anticipated Activities During JUL 96

Continue to provide input for budgets, project planning, and monthly status reports.

Produce GANTT schedules and/or PERT charts as required.

Continue activities to streamline PR/CR processing, data entry for OCM and Archive Library databases, and reporting activities for OCM and Operations.

Task 2--Management Plan Development

Abstract

This task requires SQC to develop and present program management plans, software development plans, configuration management plans, quality assurance plans, test plans, and independent verification and validation plans for use on Naval Research Laboratory's (NRL) programs.

Work Performed During JUN 96

Chaired four (4) Configuration Control Boards (CCB) which processed sixty-three (63) Problem Report/Change Request (PR/CR) actions. This included six (6) new PR/CRs, thirteen (13) analyses, eight (8) implementations, sixteen (16) validations, and twenty (20) closures.

Anticipated Activities During JUL 96

Chair CCBs as required.

Task 3--Detailed Process Development

Abstract

This task requires SQC to develop and present processes (process flow diagrams, step-by-step procedures, quality assurance procedures, and quality checklists) to be used on NRL programs.

Work Performed During JUN 96

Revised and implemented new Unclassified QC Shipping checklist.

Performed 514 Shipping QC checks.

Published the daily I/O report.

Anticipated Activities During JUL 96

Continue upgrading the Operational Configuration Management (OCM) and Archive Library Procedures as required.

Perform Shipping QC checks as required.

Complete the update of one Operations procedure to reflect changes in the BDC product receipt and distribution processes.

Complete the update of Approved for Shipping QC Procedure to reflect changes in the BDC QC process.

Task 4--Requirements Development

Abstract

This task requires SQC to meet with NRL scientists, users, customers, and others identified by the Contracting Officer's Technical Representative to document project requirements. SQC is required to document requirements in Type A and Type B specifications. The requirements are to provide program managers with capability for product assessment through analysis and testing of

performance parameters. SQC is to determine performance requirements and demonstrate satisfaction through testing.

Work Performed During JUN 96

Represented BDC at BMDO Phenomenology Science and Analysis Group's (PSAG) review of the backgrounds data. Made presentation to PSAG concerning the present efforts to archive MSX data.

Participated in lessons learned meeting concerning the ASTP proposal and participated in determining how the BDC should respond to future opportunities.

Obtained EMDAC approval for the BDC to EMDAC ICD. Forwarded the ICD to DM for approval.

Prepared two new draft ICDs: BDC to SP3 Watchdog, and BDC to DCATT PI. The BDC to SP3 Watchdog ICD is being reviewed, and the DCATT PI has approved the draft ICD.

PLDAF change requests for the BDC to PLDAF ICD were incorporated and reviewed. The BDC approved the revised version and it has been forwarded to PLDAF for their approval.

Input 2040 new subscriptions into the unclassified subscription data base, based on new ICD requirements, changes to existing ICDs, and ad hoc requests. The breakdown is as follows:

SP3 Watchdog	323
DCATT PI	1392
EMDAC	52
CTDAC	26
BDC User	96
Ad Hoc	151

There are currently 5037 unclassified subscriptions and 1287 classified subscriptions

Reviewed ICD requirements for Auxiliary data products against the newest monthly operation schedule to match DCEs with requirements and plan for the acquisition and distribution of the auxiliary data products.

Anticipated Activities During JUL 96

Incorporate external review comments into the Virtual Data Center System Requirements Document.

Obtain DM approval signatures for the BDC to EMDAC and BDC to DCATT PI ICDs.

Receive and incorporate DCATT and DM review comments for the BDC to DCATT ICD.

Revise and release the BDC to SDAC, BDC to STBDAC, and BDC to CTDAC ICDs.

Update the subscription data bases for final approved ICD requirements, and as requirements are added and modified.

Task 5--Documentation Review

Abstract

This task requires SQC to review documents prepared by NRL contractors in a variety of activities for compliance with relevant established standards, development plans, and management plans and to provide comments and recommendations to NRL. The task also requires SQC to perform technical reviews and audits (formal design reviews, informal reviews, and administrative reviews) on NRL's contractor developed hardware, software, facilities, and management documents.

Work Performed During JUN 96

Reviewed version 3.0 of the MSX Data Release Policy.

Reviewed two operations procedure updates and the procedure for producing the daily I/O report

Anticipated Activities During JUL 96

Review documents as required.

Task 6--Technical Information Preparation and Presentation

Abstract

This task requires SQC to prepare and provide formal and informal state-of-the-art techniques presentations in Project and Process Management disciplines.

Work Performed During JUN 96

Prepared and distributed CCB Minutes.

Prepared and distributed CCB PR/CR Assignment notifications.

Prepared and distributed Status Reports on DM PRs, Overdue PR/CRs and Configuration Item Status Reports.

Revised data bases to provide additional status reports.

Produced metric graphs on PR/CRs, the OCM Library, and the Archive Library.

Continued research of the DCM databases and CMS Libraries' requirements and implementation.

Continued research of the Operations database requirements and implementation.

Performed three updates to the MSX User Access List based on inputs from MSX Program Office and posted HTML version of the updates to SCIES.

Reviewed and transmitted nineteen (19) MSX BDC Receipt and Distribution Reports following MSX launch.

Designed databases to allow the tracking of Ad Hoc data requests.

Provided training to the new QC staff person

Anticipated Activities During JUL 96

Prepare and distribute CCB Minutes.

Prepare and distribute Status Reports on DM PRs, Overdue PR/CRs and Configuration Item Status Reports.

Perform updates to the MSX User Access List based on inputs from the MSX Program Office and

post HTML version of the updates to SCIES, as required.

Review and transmit daily MSX BDC Receipt and Distribution Reports.

Create new CMS Libraries and DCM CIDB.

Update the BDC Daily Product Receipt and Distribution report capability, as required.

Populate Ad Hoc tracking databases and generate status reports as required.

Continue training the new QC staff person.

Task 7--Formal Test Case and Test Procedure Development and Execution

Abstract

This task requires SQC to develop and execute detailed test cases and procedures designed to validate designated developed products prior to their being declared operational. The testing must demonstrate that all system elements satisfy NRL requirements. SQC must also verify that testing spans the overall acquisition cycle.

Work Performed During JUN 96

During the reporting period, SQC continued the management of and coordinated the planning and preparation activities necessary to successfully execute BDC System Testing.

Tracked the progress of processing ad hoc requests from CE and EM DACs.

Performed queries of the BDC pipeline tables to assist with ad hoc request processing.

Initiated two new DM PRs as a result of problems encountered during normal operations data processing.

Recommended closure of one DM PR.

Assisted the software development group by providing experiment plan and sensor information for development of catalog tables.

Activities also accomplished this reporting period include tracking the status of Operator Discrepancy Forms (ODF), PR/CRs and Data Management (DM) Problem Reports (PR), monitoring approved revisions to the MSX pipeline software, and operating procedures, the retesting effort, and closing open DST issues. Worked with Operations and Software Development to find solutions to new problems which were encountered.

The Specification & Test team, under SQC's management, acted as the central repository for problem reporting and resolution. This included coordination of problem resolution both internally at the BDC and externally between the other participating MSX data organizations. During this reporting period, S&T initiated two DM PRs, and recommended closure of one PR.

Anticipated Activities During JUL 96

Supervise and coordinate the activities necessary to complete open ad hoc requests; and the retesting required to close open DMPRs.

Continue managing the MSX and BDC system test activities, including revision of test cases/procedures, preparing new test cases/procedures, and executing the test procedures.

Continue closure actions for open PR/CRs and DM PRs assigned to the S&T team.

Perform system testing of the BDC Program Catalog and MSX Summary Catalog.